

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

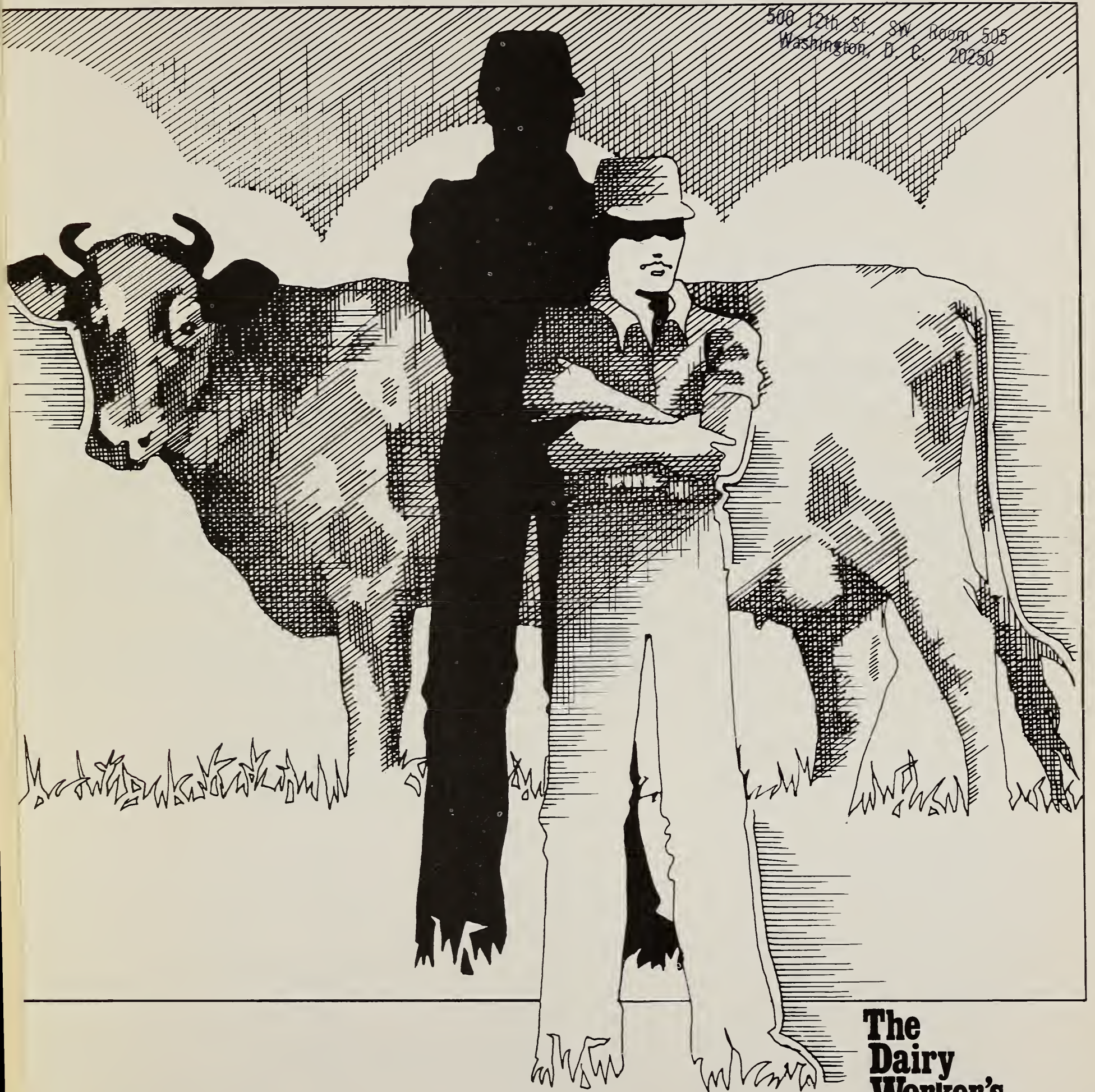
THE FARM INDEX

U.S. Department of Agriculture/August 1973

TRI-AGENCY READING ROOM

SEP 6 1973

500 12th St., SW Room 505
Washington, D. C. 20250



**The
Dairy
Worker's
Image**

What's bothering hogmen? Seven months ago they planned to up their spring 1973 pig crop by 6 percent over a year earlier. Then came bad weather, rising feed grain prices, the meat boycott, and meat price ceilings.

For these and other reasons, producers changed their minds to farrow more sows. The December 1972-May 1973 pig crop, a June 1 survey found, was down 2 percent from the year before. Farmers also reported 1 percent fewer market hogs and pigs on hand than on June 1 of 1972.

Moreover, producers indicated on June 1 they do not plan to increase the number of sows farrowing in the second half of this year. This means hog slaughter in the next 12 months might be a little smaller than a year earlier. But prices to producers should be well above the 1972 level of \$29 per hundredweight. In early July prices of barrows and gilts at seven markets were running near \$41.

The first meeting of the U.S.-USSR Joint Committee on Agricultural Cooperation is being planned for late summer. It follows an agreement signed by the U.S. and Russia in June to expand the flow of agricultural information.

Targets include regular exchange of information on production, trade, and crop forecasting techniques, further cooperation in the agricultural sciences, and stepped-up contacts between agriculture-related organizations and among specialists in the two countries.

The Joint Committee, which will meet once a year alternately in the two countries, will review and approve specific projects, establish procedures, and make recommendations to the two Governments.

One of the first groups scheduled to meet after the overall meeting is the Joint Working Group on Agricultural Economic Research and Information.

The agreement followed initial negotiations in May in Moscow where Assistant Secretary of Agriculture Carroll G. Brunthaver headed the U.S. team.

The Nation's larder of canned non-citrus fruits is emptier than usual this

summer. Short supplies and exceptional demand during the marketing season just ended brought carryover stocks to their smallest level on recent record.

As of April 1, stocks of 14 items totaled only 30 million cases, down a fourth from last year, and a third below 1971. Average packs expected from this year's harvest indicate supplies may tighten moderately through 1973/74.

Early this summer, supplies of canned apple slices, fruit cocktail, and cling peaches ebbed to their lowest level in years. Stocks of canned free-stone peaches were almost nil.

Meantime, canned pear inventories were somewhat larger, though still well below the 1972 mark. With another large Bartlett crop in prospect, canned pears—including stock for fruit cocktail—should prove ample in 1973/74.

Shortages of other canned fruits caused the bountiful 1972 tart cherry pack to move so well that carryover in 1973 was almost nonexistent. Frosts wiped out a good portion of the Lake States' tart cherry crop earlier this year.

In the freezer department, the '72 pack of frozen fruits and berries was the smallest since 1958, forcing bakers and institutions to turn to imports and substitutes.

On May 31, stocks of frozen non-

citrus fruits and berries totaled 322 million pounds, a tenth below the year-earlier mark.

Supplies of frozen peaches neared depletion by early summer, while limited strawberry stocks caused frozen strawberry imports from Mexico during January-May to surge 43 percent over 1972.

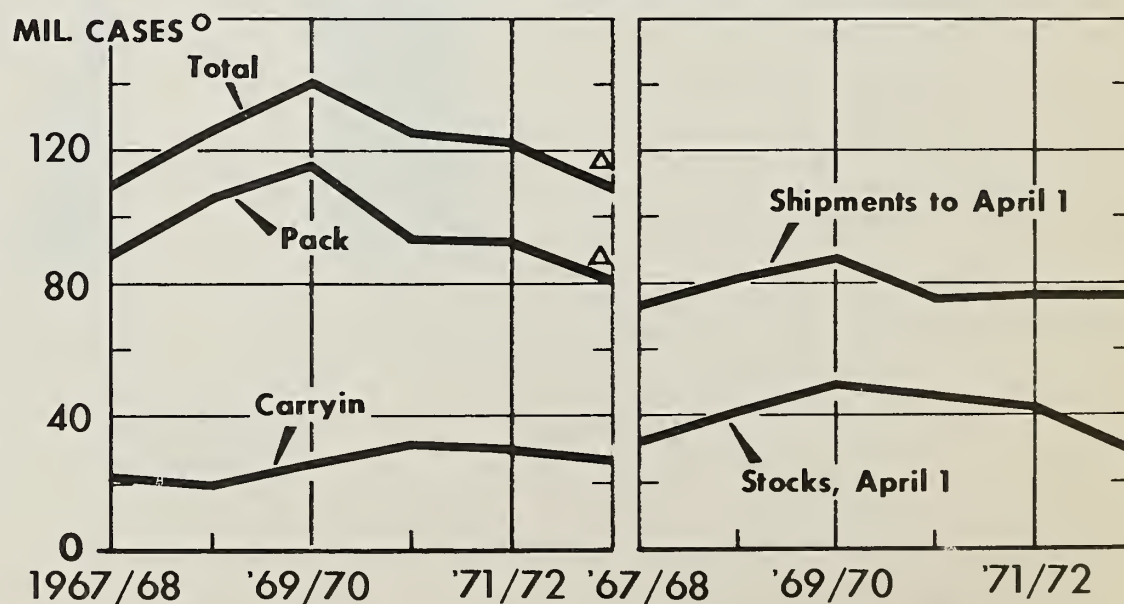
Milk output for 1973 may dip more than 1 percent below last year's 120 billion pounds. The reasons focus mainly on the feed situation: high feed prices, the lowest milk-feed ratio since mid-1965, strong slaughter cow prices, and reduced replacement stock numbers.

Despite lower output, strong milk prices expected for the rest of the year will raise gross cash receipts. But dairymen's net returns for 1973 may run below last year's, with gross income gains outdistanced by production costs, particularly for feed.

Meanwhile, CCC purchases are also reflecting the tight supply-demand situation. Removals of dairy products are expected to be the smallest since 1966, and removals of nonfat dry milk may be the lowest since the early 1950's.

Dairy product sales should continue above a year earlier through the rest of 1973, but probably at a somewhat slower rate of gain than last year's 3½ percent.

U.S. CANNED FRUIT SUPPLY AND DISTRIBUTION*



* APPLES, APPLESAUCE, APRICOTS, CHERRIES, FIGS, FRUIT COCKTAIL ITEMS, PEACHES, PEAR, PINEAPPLE, AND PURPLE PLUMS. ○ BASIS CASES OF 24 NO. 2½ CANS. △ TO MAY 1.

Egg production probably won't match year-ago levels as had been expected earlier. Imposition of price ceilings in early June has prompted producers to heavily cull their flocks and reduce forced molting of old hens, thus reducing the average age of the laying flock and removing less productive layers.

They'll likely continue to cull heavily as long as feed and old hen prices stay high. However, higher egg prices have offset much of the increased production costs and tempered the rate of culling for coming months. With prospects for relatively high egg prices in coming months and easing feed prices, forced molting of layers will likely be stepped up.

Broiler prices will continue strong. With high red meat prices, smaller broiler supplies, and larger consumer incomes, broiler prices will be well above 1972 through the rest of the year.

Spiraling feed costs may continue to keep production down through fall, although this could ease later this year if producers succeed in increasing feed grains and soybean production as planned.

Turkey meat output may gain and again exceed year-earlier levels late in the year.

Supplies for the rest of the year will be below the second half of 1972, with the strong demand for turkey meat exceeding production and reducing cold storage stocks.

To harvest this year's corn and soybean crops, and get them to storage facilities, will take an estimated 336 million gallons of fuel, mostly gas. That's enough to fill the tanks of more than 16 million autos.

To dry the corn crop may require an additional 645 million gallons of fuel—mainly LP gas. Supply situation could be touch and go. Corn drying gets into full swing just about the time when homeowners will be turning on their LP gas for heat. USDA says farmers can save on fuel by storing high-moisture corn in airtight silos, by delaying harvest till moisture content drops, and by drying with unheated air.

FARM

CONSUMER

MARKETING

RURAL

FOREIGN

Martin Schubkegel
Editor

Diana Morse
Acting Associate Editor

Diane Decker
Walter M. Patrick
Staff Editors

David Brewster
Carol Curtis
Contributing Editors

Contents of this magazine may be reprinted without permission. They are based on research of the Economic Research Service and on studies done in cooperation with State agricultural experiment stations. Use of funds for printing this publication approved by Director of the Office of Management and Budget, May 24, 1972. Subscription price: \$3.50 yearly (\$4.50 foreign). Single copies 45 cents. Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

The Farm Index is published monthly by the Economic Research Service, U.S. Department of Agriculture. August 1973. Vol. XII. No. 8.

Features

4 Accounting for the Nation's Farm Sector

ERS economists are moving now to update farm income numbers

8 Cottoning to Blue Denim

Cotton denim is a fast-fading fashion fad with considerable staying power

12 Horticultural Services . . . A Budding Industry

Businesses that plan, plant, and care for our flowers and greenery have burst into new prominence

16 The Dairy Worker's Image

If the image were better, farmers might find it a lot easier to get good workers

20 East Europe's Livestock Economy Bullish on Oilseeds

A growing market beckons for soybeans and other feedstuffs

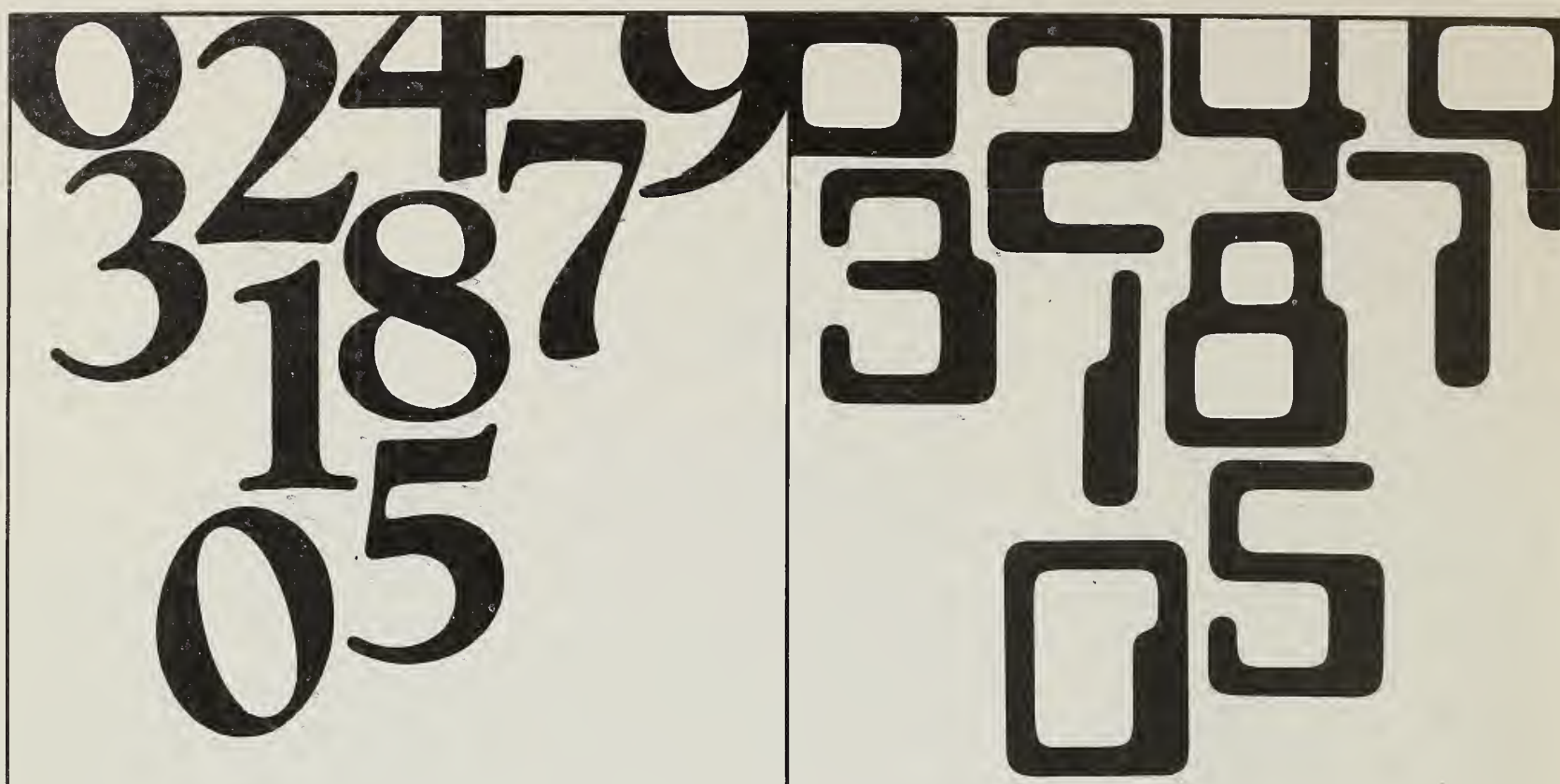
Departments

2 Outlook

22 Recent Publications

23 Economic Trends

Note: Readers are invited to write for the research materials on which we base our articles. Address queries to The Farm Index, Rm. 1459, Economic Research Service, U.S. Department of Agriculture, Wash. D.C. 20250. Please cite article titles when ordering.



ACCOUNTING FOR THE NATION'S FARM SECTOR

Farm income statistics are being closely examined with a view to bringing them up to date. Also under review—new formats for reporting income.

Economists in ERS are moving now to update farm income numbers.

The series of benchmarks previously used to calculate farm costs and receipts are somewhat old. In short, they don't completely reflect the rapid changes in the structure of the farming industry. For instance, some production costs have been understated, a case in point being the outlays for such agricultural services as custom harvesting and machine hire.

Besides estimates on custom work, this round of revisions for the first time will produce statistics on professional fees and receipts from the sale of recreational services.

The data sources for this updating, which is expected to be completed by year's end, include the SRS

1971 survey of farm expenditures; the 1969 Census of Agriculture; and the 1970 Census Survey of Farm Finance.

Economists are also investigating new formats for reporting farm income numbers. Many economists would like to see an accounting system for agriculture that is more consistent with the National Income and Product accounts, which have been in use for over 30 years.

Tracking output. Briefly, this accounting system would involve keeping track of the total output of food and fiber whether or not produced on "farms" as they are now defined. Based on a "product concept," this approach would also tell you things like the total value of agricultural goods produced, the value of goods consumed as intermediate products, changes in inventories, capital formation, and many more. Using such a system, you could calculate the net value added by agriculture as well as the value of the raw materials used

to produce the final output.

Part of the net value added would be "operator's surplus"; i.e., what the producer is actually getting back on his capital, labor, and management. The figures would be useful in making a more meaningful comparison than is now possible between earnings in farming and in other industries.

The numbers could also be plugged more directly into our Gross National Product accounts. Right now agriculture's input in the GNP accounts requires substantial conversion of figures.

Better reading. Another advantage claimed for the product concept of accounting: it enables a better reading of the real progress in agriculture's total output in these days of increasing specialization.

When the present system was originally devised back in the twenties, dairymen for instance produced most of their own feed. When receipts went up, and allowing for

price increases, this signified greater output.

Nowadays much of the feed is purchased. So, the income of these transactions is sometimes counted twice—first when one farmer sells the feed to another, and again when the second farmer sells his milk. Cattle purchases are another illustration of commodities crossing the farm gate more than once and being counted more than once in the receipt ledger.

The product concept of accounting could get around this problem. Both the sale of feed and milk is counted as part of the farm sector's total output. But the feed would also appear as an intermediate product consumed within the farm sector. This would be deducted along with other inputs to give you the net value added by the dairy farmer to the economy.

Establishment concept. Another type of account being examined is based on the "establishment concept." This goes a step further than the product concept in that it shows the total output of a farm establishment—both agricultural commodities and other products and services. An establishment would be defined as a farm establishment if it received at least half its income from farming.

The establishment concept would be useful in measuring the profitability of farming and in measuring the welfare of the farm operator's family or other groups in the farm sector. Family income would include not only operating surplus from farms but also income from nonfarm jobs. Identifying those people dependent on farming would be a departure from the concept of the farm population now used.

At present, anybody who lives on a farm is considered a part of the farm population, even though he may not produce any farm products. An income of the farm population is often taken into account by State and local governments in planning welfare programs for so-called "farm families."

If many economists and others

believe the new accounts system would be desirable, why not adopt it right away? For one thing, research is needed to determine what additional data, if any, might be required to put it into effect. This would include more information on costs now being chalked up to the farm business that really don't relate to farming. Examples: cost associated with maintaining a recreation site on the farm, and cost to operate a small plant to mix feeds or fertilizers to sell to other farmers.

[Based on special material provided by Eldon E. Weeks and Thomas A. Carlin, National Economic Analysis Division; also, on an article "A New Approach in Accounting for Our Nation's Farm Sector" by Thomas A. Carlin and Allen G. Smith, National Economic Analysis Division, appearing in *Agricultural Finance Review*, Vol. 34, 1973.]

Study Looks at Economies Of Size in Wheat Farming

Who gets a greater per-acre return on his equity—the wheat farmer with 1,500 acres or the one with 12,000?

It may be a tossup. Economists who studied wheat farms in the Great Plains found very little difference in the rate of return, if you don't count purchase discounts or sales premiums and land appreciation. Actually, farmland values in the Great Plains States have been rising about 3 percent a year since 1967.

Economists interviewed 80 large scale wheat farmers, then developed budgets for four farm sizes: 1,500, 3,000, 6,000, and 12,000 acres of cropland:

After taxes, per-acre rates of return at a 100-percent equity level worked out to approximately 5 percent for all four farm sizes.

The larger farms held the edge when considering the discounts on purchased inputs and the premiums on sales. The study estimated that discounts for volume purchases can reduce costs by about \$1 per acre

and premiums on grain sales can lift income by around \$1.30 per acre.

With these advantages, the larger farms showed a slightly higher return rate than the smaller farms. But in no size class did the rate exceed 7 percent.

Land appreciation raises rates of return on all sizes but slightly more on the larger farms. Even here, the study found the difference to be insignificant unless equity levels are 50 percent or less.

Other results of this survey—

Sixteen of the 80 sample wheat farms were incorporated, though all were closely held family corporations.

Thirty-one had ownership and management interests in businesses besides farming. About two-thirds of these interests were related to farming, including grain elevators, machinery, and other dealerships.

Production techniques varied little by farm size, with two major exceptions: larger farmers used more fertilizer and their yields were an estimated 2 bushels per acre more than on the smaller farms; also, the larger farms made greater use of custom combines.

Sixty percent of the farmers received volume discounts on machinery purchases, 45 percent on fuels, and 41 percent on herbicides. The rate of the discounts varied widely.

A fairly large share of farmers bypassed their local dealer when buying major inputs. Of the 80 farmers, 33 shopped elsewhere for machines and parts, 16 for fuel, and 25 of the 53 who used fertilizer.

Premiums for selling in volume were estimated at 0.6¢ a bushel for farmers whose gross value of crop production was \$50,000–\$99,000; 2.4¢ per bushel for farmers in the \$100,000–\$199,000 value class; and 4.4¢ per bushel for farmers in the \$200,000-and-over category.

[Based on a manuscript *Economies of Size in Wheat Farming in the Great Plains*, by Ronald D. Krenz and Walter G. Heid, Commodity Economics Division, and Harry G. Sitler, Colorado State University.]



In Idaho, cattle are driven to their new feeding ground.

'72 A BOOM YEAR FOR N.W. RANCHES

Last year was the best yet for net income on commercial cattle ranches in the Northwest, a recent ERS study shows.

In the Northern Rocky Mountain area, 1972's average net income (return to operators' labor, management, and capital) surged nearly 50 percent to around \$45,300 on ranches studied. In the Northern Plains area the increase was over 40 percent, bringing the 1972 average to more than \$43,600 per ranch.

These are two of the Nation's most important cow-calf producing centers, taking in parts of Wyoming, Montana, South Dakota, and Idaho. Ranchers get most of their income from the sale of calves to cattle feeders in the Midwest and other areas. The average breeding herd consists of about 300 high-quality Hereford or Angus cows. In 1972, total investment per ranch ranged from \$370,000 in the Northern Rocky Mountains to slightly over \$500,000 in the Northern Plains.

In the Northern Plains, a large share of last year's income gain came from higher calf prices, the ERS study said. Prices for calves delivered in the fall of '72 averaged a record \$50.40 per hundredweight, up from \$38.50 the year before.

The index of prices received for all products sold by Plains ranchers

advanced 35 points from 1971. The index of prices paid, including wages to hired labor, rose 8 points, with the largest percentage increases in real and personal property taxes and medicines and services associated with the livestock enterprise.

Besides price, other elements boosting ranch incomes in this area were record production—up nearly 4 percent, better range conditions, record calf weights, and improved management and breeding.

Many of these factors also accounted for the spurt in net incomes on ranches in the Northern Rocky Mountain area.

Calf prices—an alltime high—averaged \$50 per hundredweight last year, compared with \$39 in 1971. Total ranch production climbed almost 5 percent to a new peak. Calf weights approached the 1969 record, thanks to good range conditions and better breeding and management practices.

The index of prices received for all products, mainly cattle, rose 38 points from 1971. The index of prices paid gained 7 points, led by increases in feed and grazing fees.

[Based on the study *Costs and Returns: Northwest Cattle Ranches, 1972*, ERS-525, by Wylie D. Goodsell and Macie J. Belfield, Commodity Economics Division.]

Hatchery Count Drops But Output Cracks Records

The Nation's hatcheries, like its poultry farms, are becoming fewer in number and larger in size.

As of January 1, 1973, commercial chicken hatcheries in the U.S. numbered 989. This compares with 1,209 on that date in 1971, and close to 3,000 a decade earlier. The drop in hatchery numbers also pulled down total egg setting capacity in the U.S. to around 436 million eggs—nearly 60 million less than in 1963.

Meantime, capacities at individual hatcheries climbed steadily. Last year the average hatchery held 441,000 eggs, up nearly a fifth from a year earlier. Though hatchery numbers have declined in every size category, losses have been sharpest among those holding less than 200,000 eggs. Roughly half the Nation's chicken hatcheries now account for more than nine-tenths of total egg capacity.

The hatchery count has drifted lower in all regions since 1971. Similarly, egg capacities have narrowed in every region except the South Central, which registered a 5-percent gain during 1971-72.

Despite shrinking hatchery capacities, the number of chicks and poults produced last year cracked all previous records. Commercial hatcheries turned out nearly 3.3 billion broiler-type chicks—3 percent more than in 1971 and about double the tally 10 years earlier.

Arkansas boasted the biggest hatch with 578 million broilers, followed by Georgia with 455 million. Together with Alabama, North Carolina, and Mississippi, these States supplied more than 60 percent of the Nation's total broiler chicks in 1972.

Production of egg-type chicks fared less well, dropping back to 491 million last year. California ranked No. 1 with 58 million chicks. Georgia was runner-up with 39.6 million.

Turkey hatcheries are also fast disappearing. As of January 1, they totaled 203, down from 252 a year

earlier and roughly two-fifths their 1963 number. And though hatchery capacity across the country plunged by 10 million eggs over the decade, average capacity per turkey hatchery nearly doubled to 220,000.

Last year's turkey hatch reached a record high of 141.6 million. Minnesota hatched more than 27 million poults—close to a fifth of the national output.

[Based on *Poultry and Egg Situation*, PES-276, April 1973.]

Grain-to-Pasture Shift Doesn't Always Pay Off

Farmers wishing to shift from dryland grain production to pasture and beef cows might be better off to stop short of a full-scale changeover.

That's the gist of a study released by Colorado State University in cooperation with ERS. Data were drawn from an intermountain area spanning nearly 3 million acres of southern Idaho, Utah, and western Colorado.

Since most of the area's crops are produced on land that can't be irrigated, farmers generally follow a grain-fallow rotation program. Wheat and barley production dominate.

The study noted several good reasons for producing grass for pasture in this region. First of all, grass can adapt as readily as wheat and barley to area growing conditions.

Also, certain soil, topography, and weather factors combine to make much of the area's cropland subject to damaging wind and water erosion. Grass, according to leading conservationists, provides an effective—if not the best—form of erosion control.

Current trends in the beef industry furnish added incentive for shifting from small grains to pasture. Cattle prices are up sharply while feeder cattle supplies are running short of demand. Continued strong demand may make pasture and beef production competitive with small grains in terms of realized profits.

To measure this competitive relationship, the study analyzed returns

to a "typical" 1,600-acre farm that produces wheat and barley. Assuming wheat sells for \$1.80 a bushel, and barley for \$1.90 per hundredweight, returns to labor and management under the farm's current organization amount to \$16,820.

With a partial shift, pastureland and beef cows replace the barley crop. The study found the farmer could maintain roughly the same returns if calves sold for at least \$39 per hundredweight.

But a total shift to pasture proves unfeasible under the same price relationships, as the operator's returns would plunge to around \$4,300.

For pastureland to replace wheat production, feeder calves would have to sell for well over \$50 per hundredweight.

[Based on a manuscript entitled *Pasture Vs. Small Grains on Dryland Farms in the Intermountain Area, Western States*, by C. Kerry Gee, Commodity Economics Division, stationed at Colorado State University.]

Biggest Dairy Herd May Not Be Most Efficient

A dairyman who enlarges his herd is almost sure to boost his net farm income, but not necessarily his efficiency.

So concluded an ERS examination of costs and returns on commercial dairy farms in nine regions of the U.S.

The study, using data from the last Census of Agriculture in 1969, analyzed commercial dairy farms in five size categories based on gross sales. These conformed with the five "economic classes" used by the Census where Class V farms are the smallest (sales of \$2,500-\$4,999) and Class I farms are the largest (\$40,000 or more).

For study purposes, "herd size" was the average number of milk cows per farm in each economic class. Average U.S. herd size for economic Class II farms, for example, was 40 cows.

Regionally, there was little difference in the average number of cows per farm in each sales group

except for Class I farms. Average herds in this category ranged from 241 cows per farm in the Southwest (California) to 66 cows in the Lake States, and 78 in the Northeast. Nationally, Class I farms averaged 98 head.

Milk and other product prices, land and labor costs, cow productivity, and crop yields varied widely among the nine regions. Nevertheless, net farm incomes on farms with similar herd sizes were remarkably similar.

Biggest income differences occurred among farms in the same region with different herd sizes. In the Corn Belt, for example, net returns to farms averaging 24 head (Class III farms) came to \$5,819. But on dairy farms in the same region with 38 cows (Class II) net incomes averaged \$11,162.

The pattern was the same in each region—net farm incomes rose significantly with herd size.

Production costs also varied widely with herd size. Total costs per cow were highest on small farms with only 9-12 head (Class V farms). When herd size doubled, costs dropped sharply but began rising gradually thereafter.

Costs per cow in each region were generally lowest—thus efficiency highest—on what's commonly defined as one-man dairies—those having roughly 40 cows.

Unlike net incomes, however, production costs per cow differed considerably among farms of the same size in different regions. For example, on farms with about 16 milk cows, costs ranged from \$492 in the South Central region to \$796 in the Southwest.

The study also estimated average costs of producing 100 pounds of milk by herds in each size group. In most regions, unit costs per hundredweight dropped sharply as herd size increased to 40 cows, then declined only gradually.

[Based on a manuscript entitled *Dairy Farm Income and Milk Production Costs in the United States, 1969*, by David E. Cummins and Boyd M. Buxton, Commodity Economics Division.]

An optimistic thread in the cotton story line these days is blue denim. With domestic cotton usage slipping, demand for cotton denim has never been greater.

If any fabric can be called all-American, it's denim.

But the cloth so indelibly stamped "Made in the U.S." is actually a migrant from Western Europe. Denim was developed in the Middle Ages in Nimes, France, where it was called "serge de Nimes" (cloth of Nimes). Later, the name was Americanized to "denim."

Whatever its origins, the U.S. cotton industry is grateful to have denim around these days. At a time when manmade fabrics are giving natural fibers stiff competition, cotton usage in denim is skyrocketing. Cotton consumed in denim fabric increased 96 percent in the last 5 years, and popularity of the sturdy fabric shows no sign of letting up.

Denim into dollars. Recent figures on denim illustrate why people who make their living from cotton like it so much. According to ERS, the number of bales of cotton used domestically in the manufacture of denim rose from 348,000 in 1968 to 683,000 in 1972. Over the same 5-year period, cotton usage in all domestic textiles decreased in total.

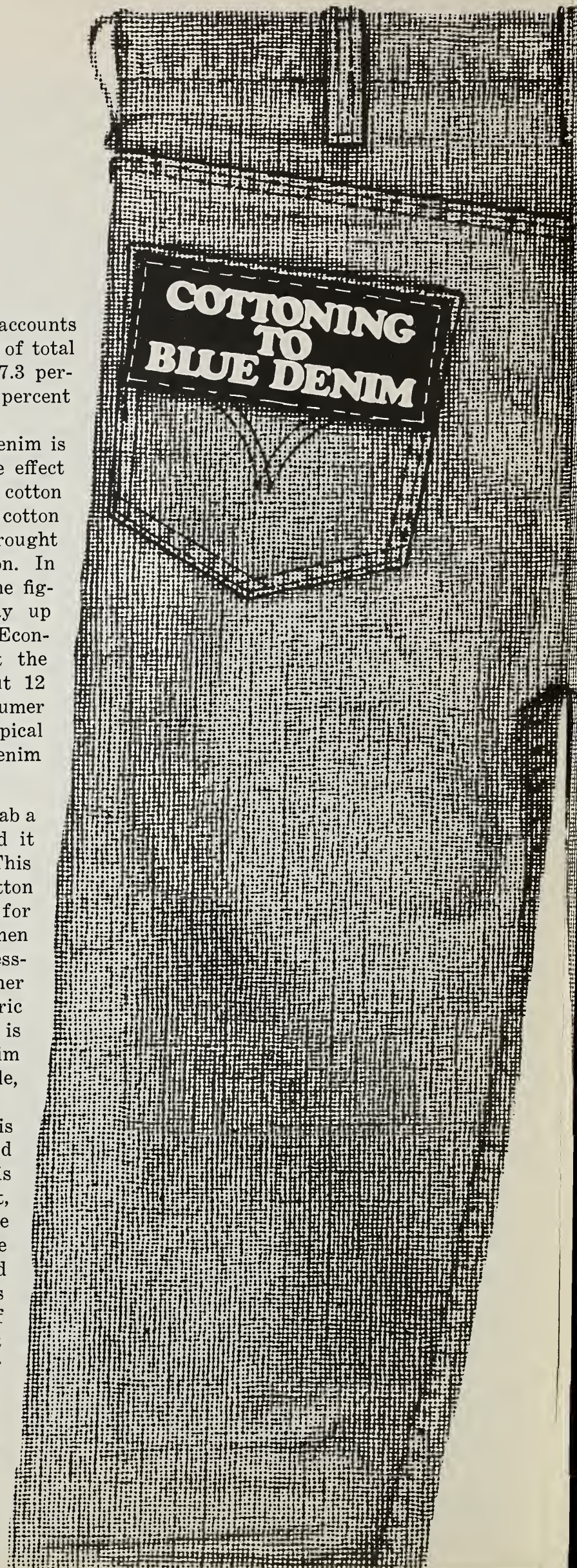
The latest ERS figures show that cotton denim is continuing to buck the decline in production of all-cotton fabric. During the last half of 1972, output of cotton denim increased 5 percent over late 1971. In the same time span, output of all cotton broadwoven fabrics decreased 9 percent. Declines were registered in the output of cotton duck, cotton sheeting, print cloth, and fine cotton fabrics.

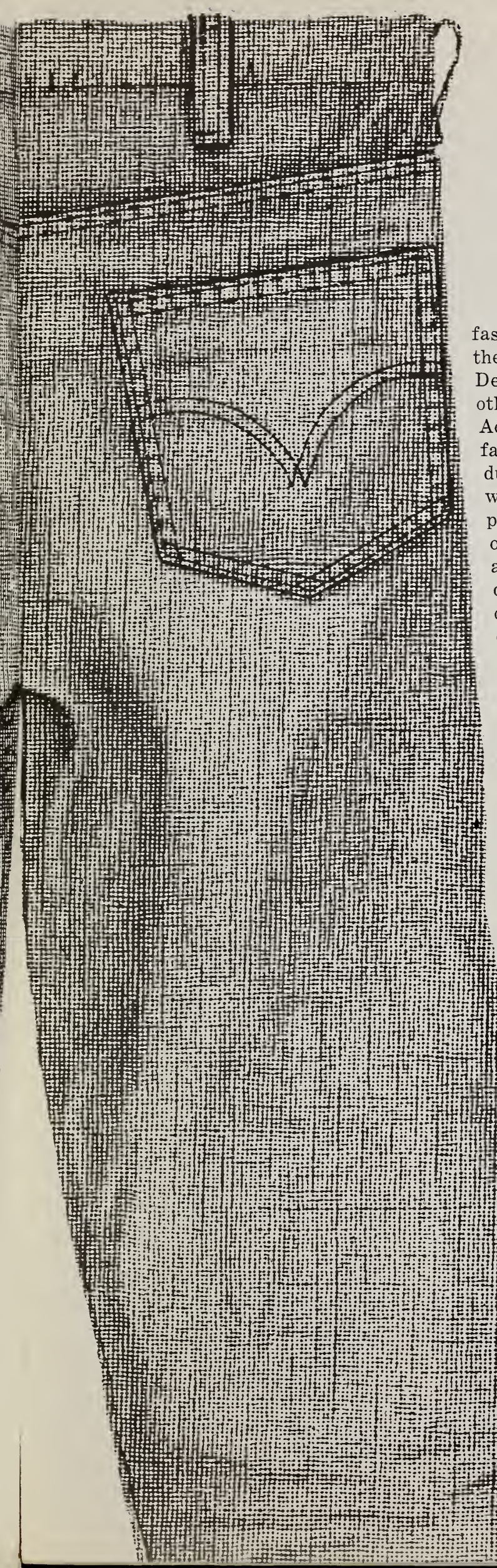
Cotton denim now accounts for about 8.5 percent of total cotton use, up from 7.3 percent in 1971, and 4.2 percent in 1968.

This demand for denim is having a considerable effect on the incomes of cotton farmers. In 1968, the cotton used in denim brought farmers \$38.3 million. In 1972, the farm income figure was all the way up to \$87.5 million. Economists estimate that the farmer receives about 12 percent of every consumer dollar spent for a typical pair of cotton denim dungarees.

Fistful of cotton. Grab a pair of old jeans and it feels good to wear. This is one reason why cotton is so much in demand for denim at a time when synthetics are successfully penetrating other areas of the fabric market. After it is washed, cotton denim becomes soft, supple, and comfortable.

Another factor is fashion. The faded look in blue denim is chic—so chic, in fact, that in a recent issue of a fashion magazine one model was quoted as saying that jeans were her "first line of clothes, with the most faded and worn pair saved for dress-up." Denim experts point out that indigo-dyed cotton denim fades





faster when washed than synthetic fabrics do.

Denim is, however, made from other textiles besides cotton. According to ERS, of all the fabric consumed in denim production in 1971, 91 percent was cotton, nearly 9 percent polyester, and the remainder other fibers such as nylon and acrylic. The most frequently used blend is 50 percent cotton and 50 percent polyester, but even this percentage of manmade fabric makes the fiber colorfast and therefore less susceptible to fading.

A final explanation for cotton denim's popularity is practicality. Though it is mostly the lower quality cotton fiber that goes into denim, the end product is rugged enough to take considerable wear and tear.

Add these things up and you get a lot of demand for denim. To be exact, ERS cotton specialists say that there were more than 220 million pairs of men's and boy's denim dungarees alone produced in 1971, or more than a pair for every man, woman, and child in the U.S.

Though this figure is for men's and boy's pants, *Women's Wear Daily* estimates that as much as 50 percent of certain lines of men's jeans are purchased by girls and women—

meaning the trend to denim is shared by everybody.

Cotton vs. manmades. Despite the increasing popularity of denim, total domestic cotton use in the U.S. has been trending slightly downward for some time. Production of all cotton fabric during the last half of 1972 was off nearly a tenth from a year earlier. The biggest decrease was in cotton used for sheets and printed cloth—areas where synthetics and blends have taken hold most firmly.

Going back a bit further, output of cotton broadwoven goods—which account for about three-fourths of all cotton used in the U.S.—declined from 7.5 billion linear yards in 1968 to 5.7 billion in 1972. Over the same time span, polyester-cotton blends shot up from 1.8 billion linear yards to 2.6 billion.

Balanced against this mixed news is some good news: U. S. cotton is enjoying an improved position in world markets. Sales of U.S. cotton abroad this year (including the much-publicized sale to the People's Republic of China) may total 5 million bales or more—a big jump from last season's 3.4 million bales. Exports of cotton denim fabric have shared in this gain, going from 101,000 bales in 1971 to 134,000 in 1972.

And, though wet weather prevented some cotton from being planted this year in the Mississippi Delta, this is not likely to affect denim production. Most of the cotton that goes into denim is grown in other areas, which were not hurt by flooding.

Experts say that expanded cotton plantings in the Texas Plains and West should just about offset the reduced acreage in the Delta. The net result could be a larger supply of the

type of cotton suitable for denim, much of which is grown in the Southwestern U.S.

By itself, increased denim use cannot single-handedly sustain the cotton industry: Over 90 percent of all U.S. cotton is still used in other ways.

There is little doubt, however, that this is one fast-fading fashioning fad that has staying power.

At last check, satellite markets were opening up worldwide. It is reported that denim dungarees are one of the hottest items on the black market in Iron Curtain countries, and that in Russia you can get as much as \$75 a pair for good, old-fashioned, long-wearing American blue jeans.

[Based on special material from Edward H. Glade, Jr., and Preston E. LaFerney, Commodity Economics Division, and on material provided by Gaylon B. Booker of the National Cotton Council of America.]

Faded Fad

The demand for denim—mostly the indigo-dyed variety—has caused the fabric to turn up in some surprising places.

In addition to the customary jeans, jackets, and other articles of clothing, would you believe a denim-covered executive dart board?

A Denim Council, headquartered in New York, has been formed to promote use of the fabric in just about everything.

The trade now holds a Denim Classic golf tournament, to which it might be chic to carry your denim suitcase. You could pack it in your car with imitation denim seat covers (they're made of nylon), and wear an all-denim outfit, including a denim hat.

Once at the tournament, your hotel room might have a bed with a denim bedspread, denim draperies, even denim window shades.

You might relax in bed in the evening by the light of your lamp with its denim lampshade, and read—perhaps the last word in denim usage—a Bible bound in denim.

[Based on special material from Edward H. Glade, Jr., Commodity Economics Division.]

Per Capita Revisions Lower Egg Consumption

The "average" American ate fewer eggs last year than in any year since the mid-1930's.

ERS, in revising consumption data on eggs, broilers, and turkeys, found Americans averaged 307 eggs per person last year, not 315 as earlier figured.

Adjustments in other per capita consumption figures were relatively minor.

Total chicken consumption averaged 42.9 pounds per person compared with 41.4 pounds in 1971. Broiler consumption was a record 38.8 pounds in 1972, up from 37.1 pounds in 1971.

Turkey consumption during 1972 was a record high at 9.1 pounds per person, up from 8.5 pounds in 1971. [Based on *Poultry and Egg Situation*, PES-276, April 1973.]

Mink Industry May Regain Some Lost Luster

With pelt names like "pearl" and "sapphire," it's not surprising that the Nation's mink industry has been called the jewel of American agriculture.

But in recent years, some of the shine has been wearing off.

Foreign competition, high feed and labor costs, low pelt prices, and some loss in mink's prestige as a status symbol have all contributed to a decline in the number of U.S. mink ranches.

However, according to a recent report, things may be looking brighter. In its 1973 annual survey of mink production, USDA's Statistical Reporting Service found that the number of bred females increased in 1973 for the first time since the Agriculture Department began estimating mink in 1969. There were 901,000 females bred to produce kits (young mink) on ranches this year—5 percent more than 1972.

Though mink production continued to decline in 1972, it did so at a

slower rate than a year earlier. There were 2.96 million mink pelts produced in the U.S. last year, 12 percent less than in 1971. In 1971, the decline was 25 percent.

The number of mink ranches also dropped. There were 1,379 mink ranches producing pelts last year, against 1,615 in 1971.

The increase in bred females indicates that pelt production should be up in 1973. A major factor in the higher numbers is the fact that ranchers are getting better prices.

Wisconsin remains the leading mink State—it produced 863,000 pelts last year.

[From *Mink Production*, MtAn 6 (73).]

Consumers Show Yearning for Yogurt

Not so very long ago, you might have been considered a bit different if you ate yogurt.

Then along came apricot yogurt and blueberry yogurt and boysenberry yogurt and . . . well, you get the picture. Word came out about yogurt being a healthful food and good for dieting and weight watching.

And so, the "average" American now eats three times more yogurt than he did 5 years ago. Per capita consumption reached 1.4 pounds in 1972.

Thus, yogurt has become the fastest-growing fluid milk product, reports ERS's *Dairy Situation*.

Lowfat milk has also made substantial gains in recent years, reaching 40 pounds per person in 1972. Gains in skim milk have been more moderate. Other fast-growing products in the past 5 years on a per capita basis are eggnog, sour cream and dips, and flavored milk and drinks.

Per capita sales of whole milk have dropped off somewhat, but it continues to lead all other dairy products.

Most cream products have shown a decline in per capita use.

[Based on *The Dairy Situation*, DS-346, July 1973.]

FLEXIBILITY A KEY IN ERS REORGANIZATION

A more coordinated research program . . . issue-oriented . . . and with greater flexibility—these are all goals in the first Agency-wide reorganization of the Economic Research Service (ERS) since it was formed 12 years ago.

ERS's realignment of programs has been brought on by the rapid changes in agriculture in recent years and the need to respond to a widening array of issues, according to Quentin M. West, Administrator of ERS.

The two major changes involve structuring research around issues rather than disciplines and creating a matrix type of organization—one involving a team approach to research, Dr. West said.

To carry this out, there has been a regrouping at ERS that became official July 1.

The number of divisions has been reduced and put under two major groups rather than three.

One group, Food and Fiber Economics, is headed by Kenneth R. Farrell, Deputy Administrator, and includes the Commodity Economics Division headed by John E. Lee, Jr., and the National Economic Analysis Division headed by William T. Manley. These new divisions are a regrouping of the former Farm Production Economics Division, the Marketing Economics Division, and the Economic and Statistical Analysis Division. The third division in this group is the Foreign Demand and Competition Division which continues under the leadership of Joseph W. Willett.

The other group, Resource and Development Economics, is headed by Lyle P. Schertz, Deputy Administrator. It includes the Natural Resource Economics Division directed by Melvin L. Cotner and the Foreign Development Division headed by William A. Faught.

In separate Department actions, ERS's Economic Development Division has been transferred to the new

Rural Development Service and a Division of Information has been transferred to ERS.

Dr. West has named Linley E. Juers to the new position of Associate Administrator to serve as Dr. West's alternate in his absence, and, among other duties, to oversee ERS's relations with universities and other research groups and to coordinate the geographical location of the ERS staff.

"The changes we have instituted should be viewed as the beginning of a continuing process of review and adjustment to changing conditions," Dr. West said in a recent speech.

Among the changes in program emphasis:

Field studies. To get away from a distinction between working in the "field" and in Washington, emphasis is placed on working where the research can best be done, whether in or away from Washington. The Agency is also seeking to provide opportunities for most researchers to gain experience both in and away from Washington.

Roads to Research

You might find an ERS researcher in the South doing a study on the impact the mechanical tobacco harvester would have on the labor market . . . in the West looking at feedlot pollution . . . in South Vietnam working on economic planning for that country's agriculture.

They're all part and parcel of ERS's research—in five broad areas that Administrator Quentin M. West pinpoints for focus in the coming years:

the food and fiber industry—its characteristics and performance;

the use and quality of natural resources;

the adjustments facing farm and other rural people;

consumer issues relating to agricultural products; and

foreign agricultural economics.

The Division. The basic administrative unit in ERS is now the Division. Formal organization below this level has been relaxed in order to maintain maximum flexibility in research direction.

The Divisions are to provide administrative services to the units, freeing research program leaders of much of the responsibility for administrative details.

Flexibility. Of top priority in the organization of personnel below the Division level is flexibility—flexibility in the range of research topics . . . and in the ways in which research resources can be combined.

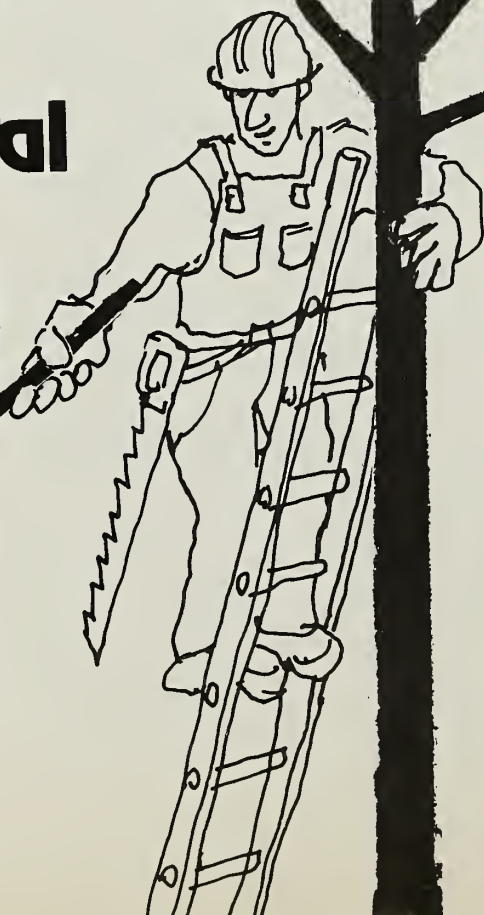
Team approach. Issues of highest priority in ERS will be given preference for research, and increasingly, a task force or team of researchers will concentrate on a single topic or project. The research may be within a given program or might cut across several areas or even Divisions.

Measuring progress. ERS has also set up the machinery for an annual review of its research objectives and performance in attaining them—with the Administrator and his staff responsible for initiating the process each year by reviewing overall Agency missions, emerging research needs, the status of on-going research, and needed adjustments in the allocation of resource support. The Administrator will then make tentative recommendations for the coming year, to be reviewed by the professional staff. A statement will then be adopted for the coming year.

"The central reason for adopting a formal procedure for identifying Agency objectives," Dr. West said, "is not to increase central control or to set our projects in concrete but rather to establish a climate in which our staff understands and agrees to the job to be done and at the same time is given the freedom to do that job as it sees fit."

[Based on special material from the Office of the Administrator, Economic Research Service.]

Horticultural Services... A Budding Industry



The care and cultivation of our flowers and other greenery have grown into a flourishing industry providing over half a billion dollars in annual services.

If you're fond of well-groomed lawns and gardens but lack the time or know-how to maintain your own,



there's a specialized industry that can help you.

The industry is called horticultural services, and it burst into prominence so recently that 1969 was the first time it rated a place of its own in the Census of Agriculture.

In compiling data on agricultural service firms, the '69 Census—the most recent—counted nearly 14,000 units whose main business was either planning, planting, or caring for flowers, shrubs, and trees. Gross receipts from these firms totaled \$545 million. These earnings were surpassed only by receipts from animal husbandry services.

Moreover, the annual payroll of horticultural firms, at \$214 million, topped that of any type of business where agricultural services were the main source of income.

Service area. Horticultural services run a gamut from planning locations and color schemes for flower beds to trimming tree limbs from public utility lines. But the work of all horticultural service firms is confined strictly to ornamentals—plants cultivated for beauty rather than use.

The production of ornamentals makes up one of the fastest growing sectors of agriculture. Once the ornamentals business began to take hold and spread, so did the importance of its service industry.

Ornamentals include cut flowers, potted and bedding plants, flowering plants, foliage, shrubs and trees, as

well as the bulbs and seeds for their production. In 1969, the farm value of these crops reached \$814 million.

More than half the wholesale value of ornamentals comes from cut flowers, florist greens, and various potted and bedding plants—items generally sold through retail florists.

Nursery products are the second largest seller. Sales of trees and shrubs jumped from \$156 million to \$280 million over the past decade.

Grass galore. Relative newcomers to the ornamentals business are commercial sod producers—the firms that roll out a grass carpet around newly built homes, offices, or public parks. In 1969, turf farms throughout the country registered sales of \$48 million.

Turf's Up

Lawn care got you down? Be glad you don't have 270 acres to mow.

That's about the average size of a turf farm in Florida, the country's chief sod producer.

Growing grass for commercial sale is such a new enterprise that production figures appeared for the first time in the '69 Census of Agriculture. That year, 924 turf farms across the country reported some 59,000 acres in sod production.

Five States—Florida, Michigan, Illinois, New York, and Wisconsin—accounted for half of all U.S. sod output. Turf sales in Florida alone amounted to nearly \$8 million—15 percent of the national total.

As for the service end of the ornamentals business, the Census listed three specific categories.

The first, landscape planning and counseling, essentially covers "blueprint" services. They involve the work of landscape architects and other professionals who design layouts for parks and gardens, and advise their clients in the selection and care of ornamentals.

Some 2,700 firms performed landscape planning and counseling services in 1969 and grossed roughly

\$66.5 million in total receipts.

The actual care and cultivation of ornamentals belong in the second category—lawn and garden services. More firms provide lawn and garden care than any other type of horticultural service.

Services include general lawn and garden maintenance such as planting, weeding, mowing, fertilizing and spraying. The Census found nearly 10,400 firms performing lawn and garden services in 1969, with gross receipts of \$223 million.

Shrub and tree services round out the third Census category and include typical arborist services—planting, spraying, pruning, bracing, and trimming. These services are frequently combined with nursery operations.

Roughly 6,400 firms reported shrub and tree services in 1969. They earned more than any other type of horticultural service—nearly a quarter of a million dollars.

Besides the three specific categories, the Census lists a group of "other horticultural services." This is something of a catchall category, as it contains landscaping and other horticultural services not listed elsewhere. Included are maintenance of cemeteries, golf courses, and highway medians.

Understatement. In reality, the total value of all horticultural services reported by the Census is understated because the Census collects data only from firms whose main business is service. For example, many nurseries and garden centers provide lawn and garden care. But since their main concern is growing plants and shrubs for retail sale, the Census classes them as producers or retailers.

If services of retail lawn and garden centers and those of unpaid individual workers were counted, horticultural services probably would have proved to be a \$1-billion business in 1969.

State leaders. That year, firms in five States—Pennsylvania, New York, California, Ohio, and Florida—dominated the horticultural service indus-

try. These States claimed 52 percent of total U.S. receipts for specified services—landscape planning and counseling, lawn and garden care, and shrub and tree services.

The concentration of these services is further emphasized by the fact that businesses in one-fourth of the U.S. took in four-fifths of the reported receipts for caring for ornamentals.

Certain types of horticultural services carry more importance in some States than others.

Arboriculture. Pennsylvania, for example, garnered \$71 million, or 29 percent, of all U.S. receipts from shrub and tree services in 1969. Earnings in Ohio were less than half as much, but still second highest in the country.

Combined receipts in Pennsylvania, Ohio, New York, and California added to more than half the U.S. total. Nearly a third of all firms reporting shrub and tree services in the last Census were located in these four States.

California led all States in the

number of firms providing lawn and garden care. The Census counted nearly 2,200 businesses with gross earnings of \$29 million—13 percent of the national tally.

New York placed second. Though the number of New York firms with lawn and garden services amounted to less than half those in California, they mustered 12 percent of the Nation's gross earnings.

California also topped the Nation in the number of firms performing landscape and counseling services and in their respective earnings. Gross receipts from 310 California businesses totaled \$10.2 million in 1969 and accounted for 15 percent of the U.S. figure.

Just over 1,000 firms in the five major horticultural States performed landscape planning and counseling services in 1969. Their combined receipts came to nearly \$35 million—more than half the Nation's total.

[Based on a manuscript entitled *A New Agribusiness: Horticultural Services*, by Richard Hall and Stephen M. Raleigh, Jr., Commodity Economics Division.]

A FEW STATES DOMINATE IN HORTICULTURAL SERVICES

Service by States	Reporting unit (numbers)	Percent of total	Gross receipts (dollars)	Percent of total
Shrub and tree services				
Pennsylvania	511	8	71,052,740	29
Ohio	391	7	30,406,524	12
New York	539	9	18,646,097	8
California	634	10	13,132,855	5
4-State total	2,175	34	133,238,216	54
U.S. total	6,372	100	248,344,228	100
Lawn and garden services				
California	2,203	21	28,829,087	13
New York	1,065	10	27,169,215	12
Florida	883	9	18,473,813	8
New Jersey	611	6	16,869,703	8
Ohio	476	5	15,722,231	7
Pennsylvania	625	6	14,673,704	7
6-State total	5,863	57	121,737,753	55
U.S. total	10,352	100	222,647,110	100
Landscape planning and counseling services				
California	310	12	10,236,236	15
New York	236	9	8,283,375	12
Florida	173	6	6,190,906	9
Pennsylvania	193	7	5,226,734	8
Ohio	141	5	4,880,136	8
5-State total	1,053	39	34,817,387	52
U.S. total	2,679	100	66,471,389	100

Chicken Giblets: Still Profitable to Process

What are they doing with all those giblets left over from sales of cut-up chickens?

Well, so far, it appears from an ERS study, it's more profitable to process and sell them than to throw them away—even though from the standpoint of conserving water and decreasing water pollution, it would be best to cease processing. Giblet processing requires large quantities of water and is a primary source of pollutants.

An ERS study based on data from a plant in North Carolina found elimination of the processing of giblets—the gizzard, liver, heart, and neck—would reduce daily water and waste treatment costs by \$111 a day.

But the profit from 1,000 pounds of giblets was \$357 when packed with the whole chicken and \$219 when sold separately, both significant sums in covering raw product and other input costs.

Gizzards—the most costly giblet to process in terms of water use and water pollution—bring \$385 per 1,000 pounds when sold at 50¢ a pound, making it uneconomical to stop processing them.

However, giblet processing could become a thing of the past in many plants if prices should fall as more giblets are marketed and costs increase.

For example, if labor would increase by a third, water and waste treatment costs quadruple, and giblet prices go down by two-thirds from their current lofty heights, the operation would probably break even. The plant might even be a few dollars ahead to sell the giblets to a renderer for \$20 to \$30 a ton.

The trend is toward selling giblets separately due to the ever-growing market for cut-up birds. It's estimated that poultry processing plants cut up about a third of the chickens they sell to retail outlets and that an additional amount is cut up later in marketing channels. The market for cut-up chickens has been increasing

by about 250 million pounds a year.

With the costs of water and treatment services soaring, and increased emphasis on water conservation and pollution abatement, plant managers must get costs under control. Aside from eliminating byproducts, alternatives include equipment changes and increased employee awareness of the need to conserve.

[Based on paper entitled "Economic Feasibility of Modifying the Giblet Operation in Poultry Processing" by A. Duymovic and C. R. Burbee, National Economic Analysis Division, W. Crosswhite, Natural Resource Economics Division, and R. Carawan, North Carolina State University, presented at the Institute of Food Technology Convention, Miami Beach, Fla., June 12, 1973.]

Fed Cattle Business Ranging Westward

Cattle feeding is a ballooning business in the Western and Southwestern States.

Last year these areas accounted for 44 percent of all fed cattle marketed, up from about a third in 1960.

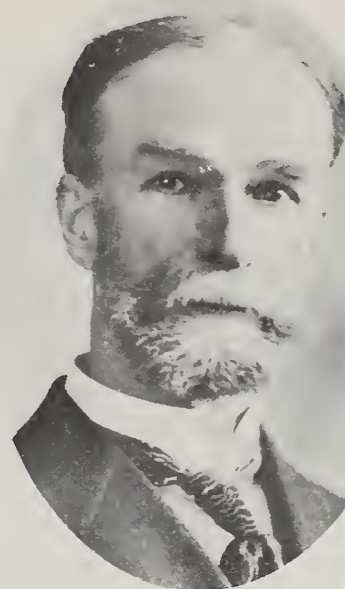
While the West showed a 9 percent increase in marketings for 1972 compared to the previous year, the Corn Belt increased fed cattle shipments about 3 percent.

During recent years, most of the gain in the West's cattle feeding has been in the Plains and Southwest, and especially in Texas.

Much of the expansion in the West's and Southwest's marketings reflects the growth in the number of large feedlots. For instance, in 1964 the Western States had only 44 lots with a capacity of 16,000 head or more. By 1972, big lot numbers had increased to 184.

As big lots increased in number so did their percentage of fed cattle marketings. Big lots accounted for 9 percent of the West's fed cattle market in 1964 compared with 32 percent in 1972.

[Based on special material from John T. Larsen, Commodity Economics Division.]



Men and Milestones

Washington, D.C., 1893—Theobald Smith, Director of USDA's Pathological Laboratory, completes his study of Texas cattle fever.

You don't hear much about Texas fever anymore, but some estimates hold that in the late 1880's, when Smith began his experiments, the disease was costing U.S. cattlemen up to \$100 million annually.

Others had wrestled with the problem before Theobald Smith, an M.D. from Albany Medical College who joined the Department in 1884. What he did was to demonstrate beyond all question that Texas fever is transmitted by ticks. His discovery was the first conclusive proof that infectious diseases can be spread from one animal to another by an intermediate carrier. It led to a campaign that all but eliminated Texas fever from the United States.

Yet the most important implications of Smith's finding were far outside the realm of bovine ill-

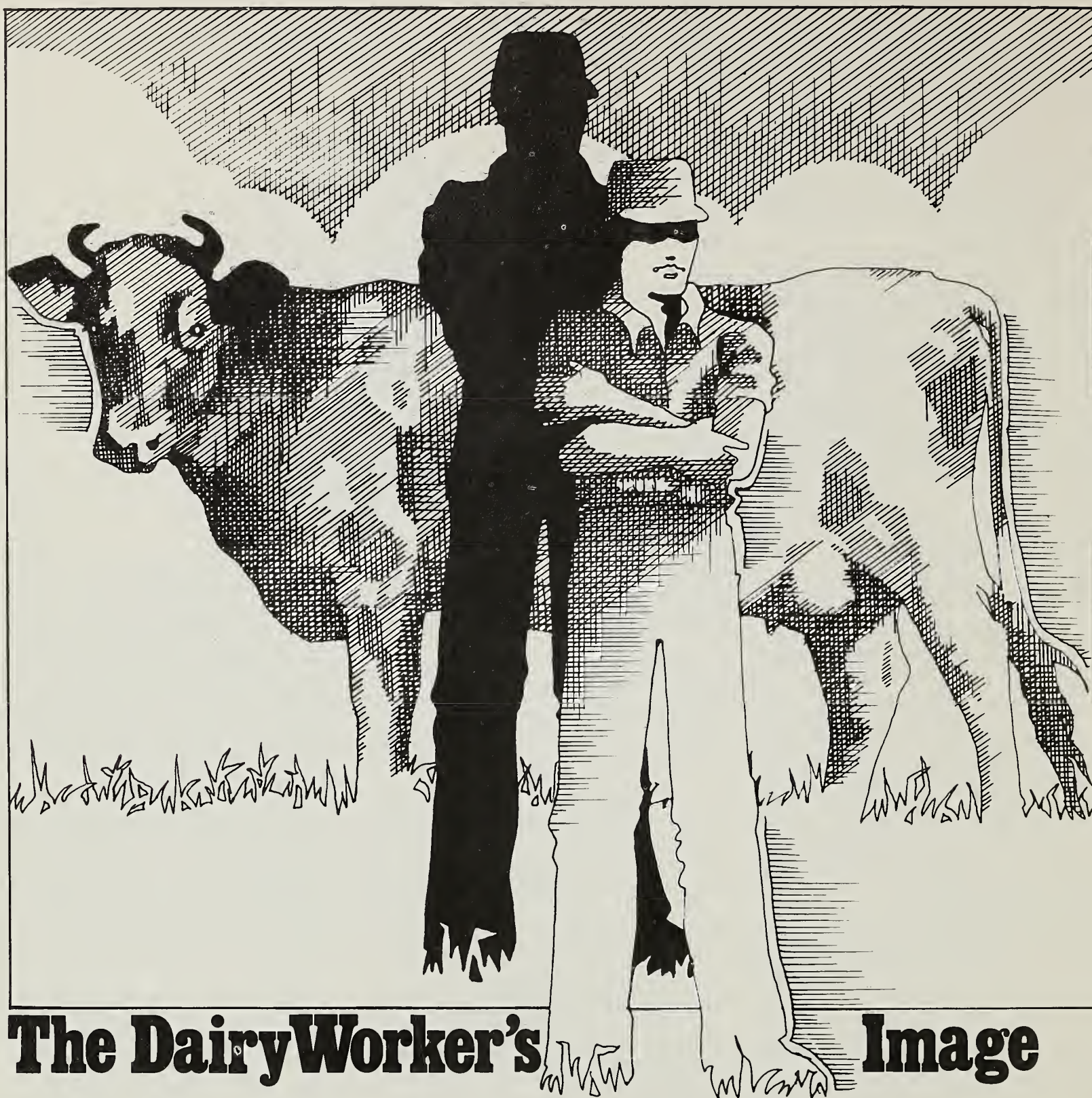
nesses. For he had opened the way to studies that pinpointed the insect carriers of such human diseases as malaria, yellow fever, typhus, bubonic plague, and African sleeping sickness.

Born on July 31, 1859, to German immigrant parents, Smith achieved a place in American medicine comparable to that of Pasteur in France, though he was little known outside his profession.

Smith left the Government in 1895 for Massachusetts where he was a professor of medicine at Harvard and director of the State Board of Health's pathological laboratory. Subsequently he served as director of the department of animal pathology at the Rockefeller Institute for Medicine.

He died December 10, 1934, just a few months after the newly established American Academy of Tropical Medicine elected him its first president.

[Based on special material by the Agricultural History Group.]



The Dairy Worker's Image

There's a lot that can be done to improve the mental picture of dairy work . . . and it could provide dividends to dairy operators in their search for good workers.

Needed: better labor management on dairy farms.

That's one of the indications from interviews with nearly 200 dairy farm workers and operators in New York State, the Nation's third largest milk producer.

The interviews were part of a USDA study into job images in dairy farming—a study brought about by farmers' complaints that they are having increasing trouble finding good dairy workers.

"We're on the threshold of an era when we have to pay attention to the fact that farmers are having to compete with industry for workers," comments the rural sociologist who headed up the study.

"In the Northeast, the reservoir of

farm-raised people is declining. Manufacturing is dispersed so that everyone is able to commute to a non-farm job.

When it comes to attracting and keeping employees, dairy work had two big assets that the employees didn't believe they'd find in comparable nonfarm work: a sense of involvement in their jobs and a feeling that their work was interesting. In fact, 85 percent said they'd pick the same career all over again.

On the other hand, both employers and employees on dairy farms agreed cash pay was lower, hours longer, and vacations shorter than for comparable nonfarm jobs. The "comparable jobs" they cited included mechanic, construction worker, and truck driver.

Answers differ. But while employers felt shorter hours, higher pay, and more fringe benefits were the best answers to getting and keeping good workers, employees concentrated on items that involved better labor management, an answer that employers put fourth on their list.

Very few of the workers interviewed had any specific understanding with their employers on the way they'd get paid, on pay raises, on what work they were to do, on fringe benefits, sick leave, incentive plans, and bonuses.

Operators tended not to like to supervise employees . . . and tended not to pay much attention to it, which led to misunderstandings and conflicts among employees and between the employee and employer.

Although agriculture is generally characterized by a lack of formal structure in the work force, perhaps nowhere is this more evident than in this study of medium and large dairy farms in New York State.

There were no written contractual agreements between employers and employees, and oral agreements were extremely varied in content. Job titles and job content were not standardized.

Part of the problem. This lack of structure was responsible for a number of the problems plaguing dairy employers, the study reported.

For instance, while most of the operators interviewed had fewer than three employees, and consequently should have little personnel turmoil, more than half said they'd had such problems as jealousy among workers over assignments or pay differentials, attempts of one to boss another, personality conflicts, and conflicts among wives and families of workers.

Dairy farm operators said they

What's He Do?

There wasn't one chore—not even milking—that was common to all the 124 hired dairy workers in the New York sampling by the Rural Development Service.

Field work was reported by more workers—90 percent—than any other task.

Milking was next, with 87 percent reporting it was among their tasks. The others all specified they did not milk.

About 4 out of 5 workers cleaned barns and fed cows, about 2 out of 3 took care of young dairy animals, and 3 out of 5 cleaned and maintained milking equipment.

Less commonly, hired farm workers reported that they prepared feed, took care of other livestock, repaired machinery, did general repairs and maintenance, kept records, maintained and built fences. Only 3 reported supervising others.

felt less equipped to handle these problems than any of the others they faced as farm operators or as members of their communities.

Another finding was that farmers tended to regard workers as part of the family or as neighbors and to look after them, helping them in emergencies—an attitude that modern workers tended to resent, considering it paternalistic.

So where does a farmer turn for guidance on better management practices?

The study conceded that most successful models for labor organization and management are really set up for large companies.

Farms slighted. "The investigation of small firms in commerce and industry or farms with small numbers of hired workers in agriculture has been slighted," the sociologist commented in the study.

However, a similar study of California dairy farms shows that greater reliance on standards and organization have shown some signs of success there.

A typical California dairy farm

rarely involves any more workers than those in New York, but in Southern California, written contracts between employers and employee unions are the rule.

Spell it out. These contracts specify wage rates based on a complex formula allowing for variations in number of cows milked, type of barn, or milking equipment. Job titles are specific, and some of the responsibility of labor supply management is assumed by the unions.

Except for the California model, the development within agriculture of alternative management structures is too spotty and infrequent to provide a basis for recommendations, according to the study.

However, the report suggested some possibilities for developing better labor management.

For one, though a "jack-of-all trades" will continue to be needed on the farm, more specialization could be encouraged. Employees could be given specific titles and written descriptions of job content based on their major responsibility, adding recognition and prestige to jobs.

Although no workers' unions exist in New York dairying, it would be a worthy objective for dairymen's organizations to undertake the task of job formalization, the study said.

Provide structure. The same organized effort could develop standards for pay scales, length of workweek, arrangements for vacation and sick leave, dollar values for traditional fringe benefits, and standardized health insurance programs. Such efforts would go a long way toward providing some much needed structure in the dairy farm labor market, and at a minimum cost of the employers' time and effort.

The study noted that more scientific examination, more study, and more discussion between employers and employees are needed to provide the kind of guidelines dairy farm operators and hired workers might wish to have.

[Based on a manuscript entitled *Job Images in Dairy Farming* by Ward W. Bauder, Rural Development Service.]

JOB MARKET PROMISING IN RURAL SOUTHEAST

Economists with USDA's Rural Development Service expect the rural Southeast to continue to pace the Nation's economy throughout the 1970's.

Addressing a rural industrialization conference held in Tifton, Ga., they reported that the "nonmetro Southeast could not only retain but increase its share of all nonfarm wage and salary employment in the next 10 years."

Prospects for job gains in manufacturing are brightened by the ability of certain industries in the rural and other nonmetro areas of the Southeast to grow independently of ups and downs in the general econ-

omy. These industries include food processing, pulp and paper, building materials, and home furnishings and appliances.

Citing construction activity as a "lead indicator of economic growth," the economists foresee a steady flow of new plants and expansions along the Ohio River and in many other prime industrial sites throughout the nonmetro Southeast.

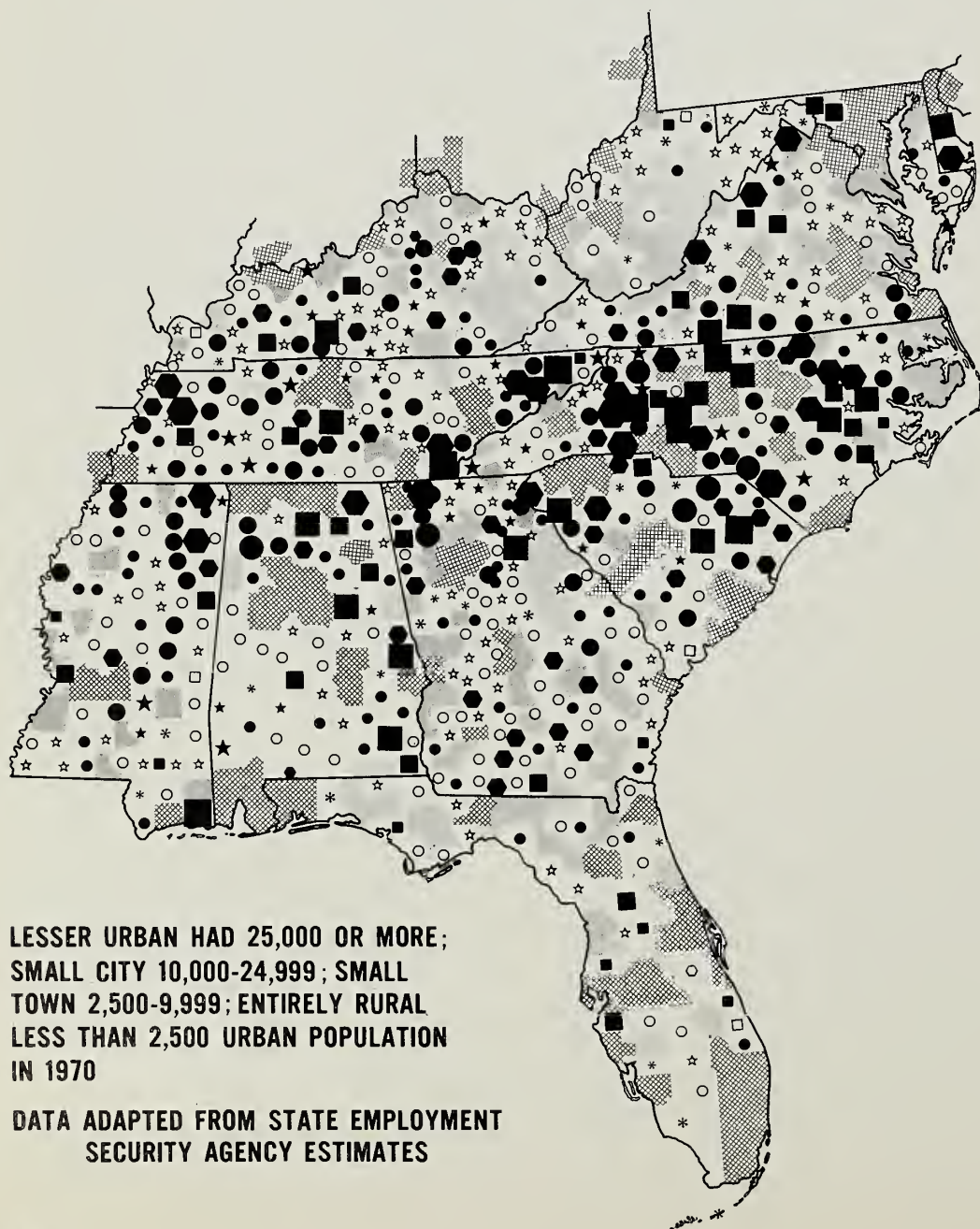
Gains in both manufacturing and nonmanufacturing employment look especially promising in the Piedmont Industrial Crescent of the Carolinas and adjoining sections of Virginia. Rural and other nonmetro communities in these areas are ripe for ex-

pansion of high-technology industries, the economists indicated.

Although the scaling down of military installations has slowed economic activity in some local communities, the effect may be only temporary if vacated facilities are made available to prospective manufacturers.

Leveling enrollments in institutions of higher learning have also resulted in job cutbacks in certain areas. "But considering the need for manpower development within the region, this again could well be a short-run problem," the economists said.

Reviewing the Southeast's per-



**Employment
Changes in the
Nonmetro Southeast:
Manufacturing ...**

formance in the 1962-72 period, the USDA economists reported that rural and other nonmetro areas added more than 600,000 manufacturing jobs—nearly twice the increase in the Southeast's metro areas and accounting for one-third of the entire U.S. expansion.

Employment in the goods-producing industries, other than manufacturing, was reduced by a quarter million due to a decrease of more than 340,000 in the farm work force. Otherwise, the construction industry showed a job gain of 5.4 percent a year—versus 4.9 percent in the metro units—and mining employment registered a small increase.

Because the nonmetro Southeast doesn't have the concentrations of

education, health, business, and other fast-growing services found in its metro communities, rates of employment gains in the service-performing industries were considerably lower during 1962-72 than in the metro units. Nevertheless, the rate of increase in wage and salary jobs in the nonmetro Southeast compared favorably with the U.S. rate.

The maps on these pages illustrate the close relationship between size of population and employment centers and the growth of both manufacturing and nonmanufacturing jobs.

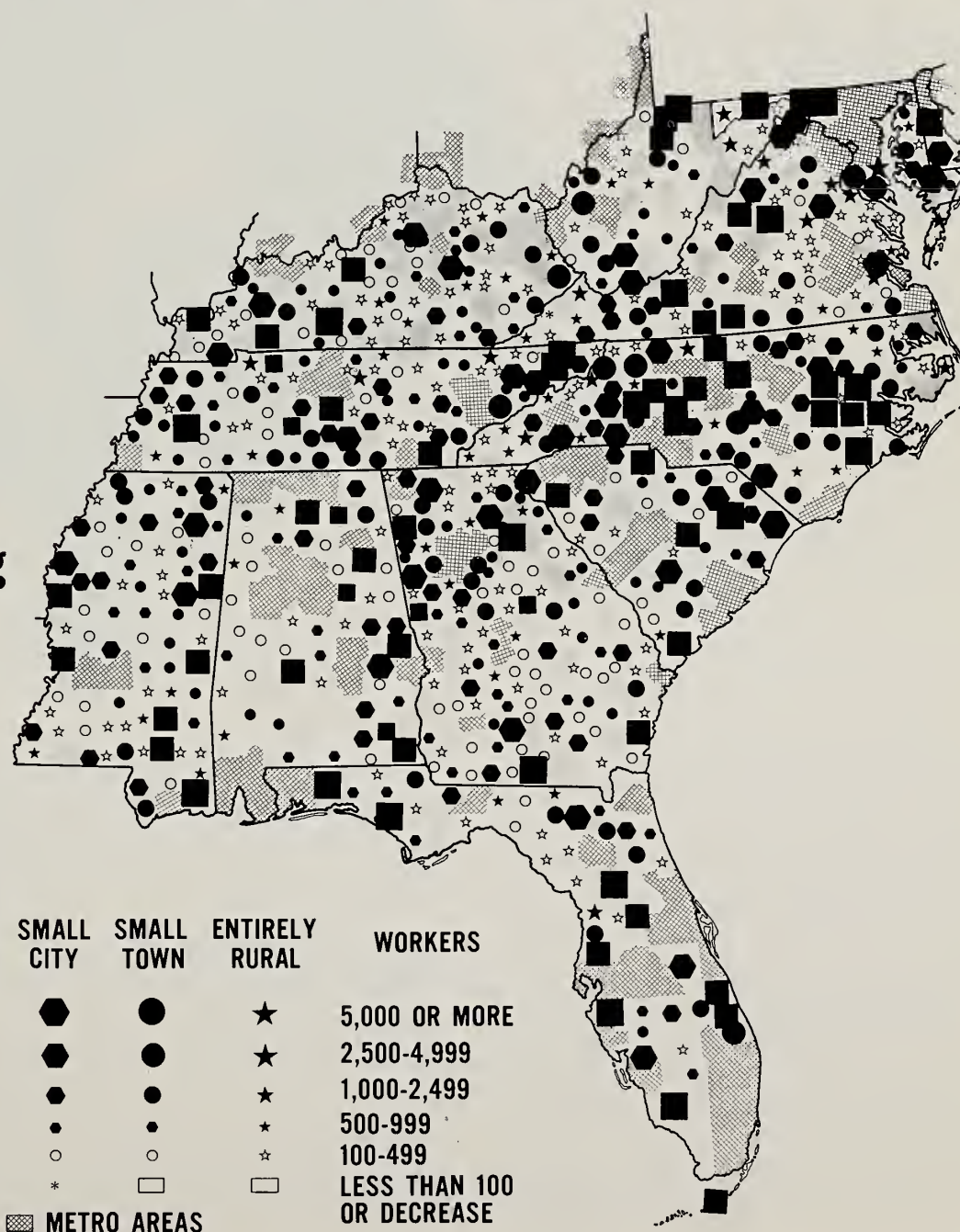
Among the lesser urban and small city areas, four areas picked up at least 5,000 manufacturing jobs in 1962-71 and about the same number

of nonmanufacturing jobs. These areas were Hickory-Newton, S.C.; Florence-Lake City, S.C.; Johnson City, Tenn.; and Pascagoula, Miss.

Eight other areas added at least 5,000 manufacturing jobs together with a minimum of 2,500 nonmanufacturing jobs: in the North Carolina Piedmont—Reidsville-Eden, Salisbury-Kannapolis, Morganton, and Shelby-Kings Mountain; in North Carolina's Coastal Plain—Lumberton, N.C., Dalton, Ga., and Cleveland, Tenn., both near Chattanooga; and in northwestern Tennessee—the Humboldt-Milan area.

[Based on a paper entitled "Rural Industrial Growth in the Southeast Since 1962," by Claude C. Haren and Nandor J. Ceplo, Rural Development Service.]

... and Nonmanufacturing During 1962-71



East Europe's Livestock Economy

Bullish On Oilseeds



A ready market for feed grains and oilseed cake and meal has begun to emerge in East Europe as the region moves ahead with plans to boost livestock output.

Growth potential may best describe market conditions in East Europe up to 1980—at least for world oilseeds and feed grains. The region's total grain imports, however, are expected to decrease.

These are conclusions from a new

study of East Europe's feed-livestock situation, covering Czechoslovakia, East Germany, Poland, Bulgaria, Hungary, Romania, and Yugoslavia.

Behind the fast-rising market for oilseeds—principally soybeans—and feed grains is expansion of Eastern Europe's livestock industry, the main thrust of current 5-year programs. Bigger output and improved efficiency in the livestock sector are expected to raise demand for feeds. Domestic meal and grain production

of the region's three northern countries will be hard put to meet the ballooning requirements.

The need to lift livestock production is two-sided. Traditionally an exporter of meat, meat products, and live animals, East Europe depends on livestock products as a vital source of foreign exchange. But the overriding need is to fill growing—and changing—domestic demand.

The region's population, estimated at 123.5 million in 1970, will swell by

some 10 million through 1980. Adding to consumer demand are rising per capita incomes, projected to increase by at least 4 percent a year in each country.

Most significant is the changing composition of East European diets from high carbohydrate foods to high-protein livestock products. By 1980, East Europeans will consume 8 million tons of meat per year—40 percent more than in 1966–70. More than half will be pork, and roughly a third, beef and veal.

Except in Romania and Yugoslavia, use of grain as food will decline throughout East Europe. The trend will be more pronounced in the northern region (East Germany, Poland, Czechoslovakia) than in the poorer southern countries (Yugoslavia, Romania, Bulgaria, and Hungary). Nearly all growth in grain output—24 million tons over the decade—will be fed to livestock.

By decade's end, livestock will account for roughly two-thirds of total grain use, compared with less than half in 1970. Nevertheless, the rate of increase in grain feeding will slacken after 1975, as grain feeding approaches West European standards and farmers substitute more protein meal in concentrated feeds.

On average, protein meal will amount to 10 percent of all concentrates fed to livestock by 1980, up from 7½ percent at present. East Germany—the region's most efficient livestock feeder—is expected to boost its protein portion to nearly 16 percent.

Total East European protein meal requirements for 1980 are projected at 5.8 million tons, more than double the 1966–70 level. The northern countries, with more intensive livestock industries, will require 3.2 million tons; the southern nations, 2.6 million.

Shy on crushings. Limited crushing facilities partly explain why domestic oilmeal production will fall short of anticipated demands from the livestock sector. In 1970, crushing capacity in all of East Europe totaled 2.9 million tons—only 60 per-

cent of the region's needs.

Expansion of crushing facilities received little attention in the past as East Europe apparently found it more economical to import oilseed meal than to buy seeds for domestic crushing. Moreover, domestic crushing poses a problem in finding outlets for the resulting vegetable oil, as East Europeans consume very little.

Poland and Yugoslavia intend to substantially enlarge crushing capacities by 1975; Poland by 300,000 tons, and Yugoslavia by 150,000 tons.

Efforts are also underway to accelerate oilseed production. The region's two major oilseeds—sunflowerseed and rapeseed—now are produced on only about 2 percent of all agricultural land.

Soybeans remain a minor crop, though higher production is slated for Romania and Bulgaria. Romania, for example, plans to double soybean area to 300,000 hectares and expand sunflower area at the expense of wheat production.

Trade turnabouts. As it's shaping up, East Europe's livestock industry will generate some noticeable shifts in the region's trade patterns.

For one thing, East Europe's net grain imports will be lower than in the past. This trend began during the sixties, when net grain imports slipped from 7 million to 4.1 million tons annually.

The three northern countries (East Germany, Poland, and Czechoslovakia) will still have to import grains—some 5.7 million tons in 1980. But the southern nations, which began building exportable surpluses during the sixties, may have an exportable surplus of 2.7 million tons.

With total production seen slightly over 94 million tons—against domestic use of over 97 million tons—grain imports in 1980 may not be larger than 3 million tons for the whole region.

About oils. Oilseed products display opposing trends. Imports of oilmeal and oilcake more than doubled dur-

ing the sixties, proving the region's fastest growing farm import.

By 1980, only Romania is expected to be self-sufficient in oilmeal production. To meet the projected requirement, East Europe would have to increase net oilmeal imports to 3.6 million tons—more than two and a half times the 1966–70 level.

However, it may be unrealistic to assume that the four southern countries of the region will allow oilseed imports to reach a million tons while there's an exportable grain surplus of 2.7 million tons. More likely, larger-than-projected amounts of grain—instead of oilmeal—will be fed to livestock. Even so, East Europe will continue to prove an expanding market for high-energy protein meals.

The Soviet Union and the U.S. provide the bulk of East European oilseed imports—37 and 25 percent, respectively, during 1966–70. The U.S. was then the region's only foreign source of soybeans.

Agricultural trade between East Europe and the U.S. is expected to pick up noticeably in the wake of the changing composition of the region's grain trade and recent moves to ease trade relations.

Grain drops. Though East Europe's net grain imports are projected to decline to 3.0 million tons by 1980—from 4.4 million annually during 1966–70—U.S. grain exports to the region are likely to increase. This is due to:

- ✓ continued strong import demand in the northern countries (Czechoslovakia, East Germany, and Poland),
- ✓ the rising share of feed grain imports at the expense of wheat imports,
- ✓ developing grain shortages in the Soviet Union—the traditional supplier—and,
- ✓ the lack of grain trade among the deficit northern countries and the surplus southern countries.

[Based on manuscript by Francis S. Urban, Foreign Demand and Competition Division, entitled *The Feed Livestock Economy of Eastern Europe: Prospects to 1980.*]

Recent Publications

Farm Corporations . . . A Financial Analysis. George Coffman, Farm Production Economics Division. AER-241.

Of the total 3.1 million farm tax returns filed in 1968 only 20,000 were from farm corporations. Even this small number represents an increase, but most of the gains were corporations using the subchapter S option. These are closely held corporations, taxed like partnerships. Farm corporations as a group tended to have more losses and lower returns, with greater variability than certain other corporate industries. The 1963-68 average rate of earning on assets (cost of acquisition value) was 4.5 percent with a 5.3 percent rate of return on equity. Farm corporations had moderate financial strength in 1968. They averaged \$317,000 in assets, produced \$260,000 in receipts, and earned \$17,000 net income.

Cotton Gin Operating Costs in the Lower Rio Grande Valley of Texas—1970 and 1971. Charles A. Wilmot, Dale L. Shaw, and Betty K. Heron, Marketing Economics Division, MRR-1001.

This is one of a series of ginning cost studies conducted by USDA in the major producing areas of the Cotton Belt. It is the first such study of the Lower Rio Grande Valley. Other producing areas now being covered in annual reports are West Texas, the Blacklands of Texas, the Mississippi Delta, and the San Joaquin Valley of California. Findings contained in these reports are derived from gin operating cost records which are received annually by mail from a sample of gins located in each area. Area ginners use these findings as benchmarks or guides in evaluating their efficiency.

Increasing Impact of Federal Estate and Gift Taxes on the Farm Sector: Present Law and Proposed Changes. W. Fred Woods, Farm Production Economics Division. AER-242.

This report is intended to inform readers as to the nature of death taxes and their increasing impact on U.S. farm estates and to point

out some potential changes in Federal estate and gift tax provisions. The report is not a prescriptive guide to estate planning.

Fruits: Production, Use, Value; Part II Noncitrus 1971-1972. Statistical Reporting Service. FRNT 2-1 (73).

This report presents statistics on production, price, value, and utilization for 5 fruits—apples, avocados, cranberries, dates, and olives—as well as the summary tables for 16 specified noncitrus fruits. Part I,

Single copies of the publications listed here are available free from The Farm Index, Economic Research Service, U.S. Department of Agriculture, Washington, D.C. 20250. However, publications indicated by () may be obtained only by writing to the experiment station or university. For addresses, see the July and December issues of The Farm Index.*

published in May 1973, contained statistics for apricots, cherries, figs, grapes, nectarines, peaches, pears, persimmons, plums, prunes, bushberries, bananas and papayas. The value estimates in this report cover the marketing season or crop year and should not be confused with cash receipts from these crops for a calendar year.

Farm Mortgage Lending: Experience of 15 Life Insurance Companies, Federal Land Banks, and Farmers Home Administration, July-December 1972 and Calendar Year 1972. Forest G. Warren and Nan P. Mitchem, Farm Production Economics Division. FML-30.

Farm mortgage lending climbed sharply in 1972 as interest rates dipped under 1971 to a 3-year low. Interest rates charged during the last half of 1972 by the two principal reporting lenders—Federal land banks and life insurance companies

—were about half a percentage point below a year earlier and about 1 percentage point below 1970's high. Over 30 percent of the new money loaned was used to purchase farm real estate, compared with about 20 percent during the peak interest year of 1970.

The Turkey Industry: Structure, Practices, and Costs. William W. Gallimore and Ruth J. Irving, Marketing Economics Division. MRR-1000.

The turkey industry has changed substantially since the early 1950's. Although turkeys are produced in several regions, production has become more concentrated in some regions. The number of flocks has decreased, while the average size of flocks has increased. Turkey production and marketing are still highly seasonal, although considerable research and effort have been directed toward spreading production and marketing throughout the year. Only since 1966 have production and processing become noticeably less seasonal.

Livestock and Meat Statistics. Economic Research Service, Statistical Reporting Service, Agricultural Marketing Service. Stat. Bull. 522.

This is the third base bulletin of *Livestock and Meat Statistics*. The original Statistical Bulletin No. 230 was published in 1958. Statistical Bulletin No. 333 was published in 1963, and annual supplements were published in 1964-1972. This bulletin contains long-term historical series starting with 1950. It supersedes annual supplements to Statistical Bulletin No. 333, and includes revisions for earlier years where necessary. Because of several additions and deletions of tables, the tables have been renumbered. The original bulletins should be referred to for historical information prior to 1950. Figures for continuing most of the tables in this edition on a weekly or monthly basis are published currently, principally in statistical releases of the Statistical Reporting Service.

Economic Trends

Item	Unit or Base Period	1967	1972		1973		
			Year	May	Mar.	Apr.	May
Prices:							
Prices received by farmers	1967=100	—	126	123	159	157	163
Crops	1967=100	—	115	114	140	143	154
Livestock and products	1967=100	—	134	130	174	168	169
Prices paid, interest, taxes and wage rates	1967=100	—	127	125	138	140	143
Family living items	1967=100	—	124	124	132	134	136
Production items	1967=100	—	122	120	138	139	144
Ratio ¹	1967=100	—	100	98	115	112	114
Wholesale prices, all commodities	1967=100	—	119.1	118.2	129.7	130.7	133.5
Industrial commodities	1967=100	—	117.9	117.6	122.7	124.4	125.8
Farm products	1967=100	—	125.0	122.2	160.9	160.6	170.4
Processed foods and feeds	1967=100	—	120.8	118.6	141.4	139.8	145.0
Consumer price index, all items	1967=100	—	125.3	124.7	129.8	130.7	131.5
Food	1967=100	—	123.5	122.3	134.5	136.5	137.9
Farm Food Market Basket: ²							
Retail cost	1967=100	—	121.3	119.8	134.9	137.0	138.2
Farm value	1967=100	—	124.4	121.5	155.1	156.2	155.7
Farm-retail spread	1967=100	—	119.3	118.7	122.1	124.9	127.1
Farmers' share of retail cost	Percent	—	40	39	45	44	44
Farm Income: ³							
Volume of farm marketings	1967=100	—	111	84	83	75	81
Cash receipts from farm marketings	Million dollars	42,693	58,550	3,899	5,006	4,449	5,100
Crops	Million dollars	18,434	24,233	996	1,462	1,228	1,400
Livestock and products	Million dollars	24,259	34,317	2,903	3,544	3,221	3,700
Realized gross income ⁴	Billion dollars	49.0	66.4	—	75.6	—	—
Farm production expenses ⁴	Billion dollars	34.8	47.2	—	53.5	—	—
Realized net income ⁴	Billion dollars	14.2	19.2	—	22.1	—	—
Agricultural Trade:							
Agricultural exports	Million dollars	—	9,404	712	1,408	1,264	1,365
Agricultural imports	Million dollars	—	6,459	525	659	696	786
Land Values:							
Average value per acre	Dollars	⁶ 168	⁷ 219	—	—	—	⁸ 247
Total value of farm real estate	Billion dollars	⁶ 181.9	⁷ 230.5	—	—	—	⁸ 258.7
Gross National Product: ⁴							
Consumption	Billion dollars	793.9	1,151.8	—	1,237.9	—	—
Investment	Billion dollars	492.1	721.0	—	773.6	—	—
Government expenditures	Billion dollars	116.6	180.4	—	199.7	—	—
Net exports	Billion dollars	180.1	254.6	—	266.8	—	—
Income and Spending: ⁵							
Personal income, annual rate	Billion dollars	5.2	-4.2	—	-2.2	—	—
Total retail sales, monthly rate	Million dollars	629.3	935.9	924.0	1,001.3	1,007.4	1,012.2
Retail sales of food group, monthly rate	Million dollars	26,151	37,365	37,141	41,979	40,978	41,562
Employment and Wages: ⁵							
Total civilian employment	Millions	5,759	7,918	7,985	8,431	8,540	—
Agricultural	Millions	74.4	⁸ 81.7	⁸ 81.5	⁸ 83.9	⁸ 83.9	⁸ 84.0
Rate of unemployment	Percent	3.8	⁸ 3.5	⁸ 3.3	⁸ 3.5	⁸ 3.3	⁸ 3.3
Workweek in manufacturing	Hours	3.8	5.6	5.8	5.0	5.0	5.0
Hourly earnings in manufacturing, unadjusted	Dollars	40.6	40.6	40.5	40.9	41.0	40.8
Industrial Production: ⁵							
1967 = 100		2.83	3.81	3.78	3.98	4.01	4.02
Manufacturers' Shipments and Inventories: ⁵							
Total shipments, monthly rate	Million dollars	—	114	113	122	123	123
Total inventories, book value end of month	Million dollars	46,449	62,432	61,267	69,715	70,462	70,938
Total new orders, monthly rate	Million dollars	84,655	107,719	103,685	110,175	110,577	111,469
	Million dollars	46,763	63,481	62,046	72,802	73,319	74,055

¹ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. ² Average annual quantities of farm food products purchased by urban wage-earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. ³ Annual and quarterly data are on 50-State basis. ⁴ Annual rates seasonally adjusted first quarter. ⁵ Seasonally adjusted. ⁶ As of March 1, 1967. ⁷ As of March 1, 1972. ⁸ As of March 1, 1973. ⁹ Beginning January 1972 data not strictly

comparable with prior data because of adjustment to 1970 Census data.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

UNITED STATES GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS, WASHINGTON, D.C. 20402
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE
& FEES PAID
U.S. DEPT.
OF
AGRICULTURE
AGR 101



8112 TRRERO500A122 18038 0001
TRI-AGENCY READING ROOM
500 12TH STREET NW #505
WASHINGTON DC 20250